

REMARKS

Applicants submit this paper in response to the Office Action dated November 9, 2001 that was issued in the above-identified application. Applicants request a two-month extension of time and enclose the fee required pursuant to 37 C.F.R. §1.17(a)(2). Applicants also enclose a Supplemental Information Disclosure Statement and Form 1449. Applicants respectfully request reconsideration of the instant application in view of the amendments and remarks presented herein.

Claims 1 and 27-51 are pending. Claims 1, 42, 50 and 51 have been amended. Rewritten claims appear in the preceding "IN THE CLAIMS" section. Attached hereto is a marked-up version of the changes made by the instant amendment captioned "VERSION WITH MARKINGS TO SHOW CHANGES MADE" and is included pursuant to 37 C.F.R. §1.121(c)(ii). Should any discrepancies be discovered, the version presented in the preceding "IN THE CLAIMS" section shall take precedence.

Amended claims 1, 42, 50 and 51 are fully supported by the application as filed and, therefore, do not constitute new matter. Applicants do not believe that the instant amendments narrow the scope of the claims in any way since changes are limited to deleting text from prior versions of the claims.

Claims are Novel Over the Cited Document

Claims 1, 27, 32, 42, and 50 are rejected under 35 U.S.C. §102(b) as allegedly anticipated by French application FR 2743421 by Ronfard et al. (hereinafter "Ronfard"). The

Examiner has alleged that Ronfard discloses a device with a substrate for adhesion of cell traces consisting of material residues separated from the cells.

Applicants traverse this rejection and assert that the instant claimed invention is not anticipated by Ronfard. Applicants assert Ronfard does not disclose a process for the analysis of cell traces consisting of material derived from cells. Applicants invite the Examiner's attention to the definition of "cell traces" provided in the instant application, *inter alia*, at page 7, lines 1-27. This description clearly indicates that "cell traces" according to the instant invention consist of **cellular material**. In contrast, Ronfard discloses a process for analyzing **exogenous material**, *i.e.*, fibrin, coated onto the surface to detect keratinocyte migration. *See e.g.* Ronfard, English Translation, page 3, lines 8-10 and claim 1. Ronfard does not teach or suggest that these "impressions" consist of cellular materials. Since Ronfard fails to teach each and every element of the claimed invention, Applicants respectfully request withdrawal of this rejection.

Claims are Nonobvious Over the Cited Documents

Claims 1 and 27, 29, and 30 have been rejected under 35 U.S.C. §103(a) as allegedly obvious over U.S. Patent No. 4,359,527 to Zetter (hereinafter "Zetter") in view of EP 0 347 210 by Loken et al. (hereinafter "Loken"). The Examiner has alleged that Zetter discloses a diagnostic assay wherein the area of a phagokinetic track left by at least one capillary endothelial cell is measured. The Examiner has acknowledged that Zetter does not disclose multiparameter analysis of cells in a body fluid. The Examiner has alleged that Loken discloses multiparameter analysis of cells in a body fluid.

Applicants traverse this rejection and assert that the instant claimed invention is not obvious over Zetter in view of Loken. Applicants respectfully point out that Zetter, like, Ronfard, does not teach or suggest cell traces that consist of cellular material. Zetter discloses an assay wherein the area of phagokinetic tracts are measured. *See e.g.* Col. 2, lines 2-4, and claim 1. Zetter describes phagokinetic tracts as follows: "The cells ingest the gold and, as they move, leave bare areas or phagokinetic tracts as records of their movement." Col. 1, lines 38-40, emphasis added. Thus, Zetter fails to teach or suggest cell traces that consist of cellular material.

Loken appears to disclose multiparameter analysis of cells in a body fluid, but fails to disclose an assay of any kind of cell trace. Since Zetter and Loken, whether considered separately or in combination, fail to teach or suggest each element of the claimed invention, Applicants respectfully request withdrawal of this rejection.

Claims 1 and 38 have been rejected under 35 U.S.C. §103(a) as allegedly obvious over Zetter alone. The Examiner has alleged that Zetter discloses a diagnostic assay wherein the area of a phagokinetic track left by at least on capillary endothelial cell is measured. The Examiner has acknowledged that Zetter does not disclose predetermined surface tracts, but alleges that such would have been obvious to one of ordinary skill in the art.

Applicants traverse this rejection and assert that the instant claimed invention is not obvious over Zetter. Applicants do not acquiesce in the Examiner's assertion, but rather respectfully point out that the question of predetermined surface tracts as recited in instant dependent claim 38 is moot in view of the failure of Zetter to teach or suggest each and element

of independent claim 1, *i.e.* cell traces consisting of cellular material, as discussed in the preceding paragraphs. Applicants, therefore, respectfully request withdrawal of this rejection.

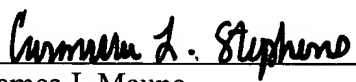
Claims 1 and 27, 32, 42-47, and 50 have been rejected under 35 U.S.C. §103(a) as allegedly obvious over Ronfard in view of the instant application. The Examiner has alleged that Ronfard discloses a diagnostic assay wherein cells adhere more poorly to the surface than on surface tract regions. The Examiner has acknowledged that Ronfard does not disclose the cell treatment and testing techniques of claims 43-47. The Examiner has alleged that Applicant's application indicates that such cell treatment and testing techniques are known in the relevant field of art.

Applicants traverse this rejection and assert that the instant claimed invention is not obvious over Ronfard. Applicants do not acquiesce in the Examiner's assertion, but rather respectfully point out that the question of cell treatment and testing techniques recited in dependent claims 43-47 is moot in view of the failure of Zetter to teach or suggest each and every element of independent claims 1, 42, and 50, *i.e.* cell traces consisting of cellular material, as discussed in the preceding paragraphs. Applicants, therefore, respectfully request withdrawal of this rejection.

The Commissioner is hereby authorized to charge any fees due with this submission not otherwise enclosed herewith to Deposit Account No. 02-4377. Please credit any overpayment of fees associated with this filing to the above-identified deposit account. A duplicate of this page is enclosed.

Respectfully submitted,

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Enclosures

VERSION WITH MARKINGS TO SHOW CHANGES MADE

This marked-up version was prepared with DeltaView software (v2.5.163). In this section, added text is marked with double underlining. *e.g.* added text, and deleted text is marked by a single strikethrough, *e.g.* ~~deleted text~~.

IN THE CLAIMS

Claim 1 has been **amended** as follows:

1. (TWICE AMENDED) A process for the manipulation of biological cells, in which the cells are applied to a substrate, which is at least partially structured and/or surface modified, and move adhesively over ~~the surface track regions of the substrate while producing cell traces, wherein the cell traces consist of material residues separated from the cells~~ and cell tests are performed on the cell traces.

Claim 42 has been **amended** as follows:

42. (AMENDED) A device for cell trace based testing of biological cells with a substrate having surface regions, on which the cells adhere more poorly than on surface track regions, ~~in which the cells adhere well and can move adhesively, wherein the surface track regions are arranged for the adhesion of cell traces consisting of material residues separated from the cells.~~

Claim 48 has been **amended** as follows:

48. (AMENDED) A process for cell trace based cultivation of biological cells, in which the cells are applied to an at least partially structured and/or surface modified substrate and move adhesively over the surface of the substrate while producing cell traces, ~~wherein the cell traces consist of the material residues separated from the cells,~~ and a cultivation of the same or a different type of cells is performed on the cell traces.

Claim 50 has been **amended** as follows:

50. (AMENDED) The process of testing ~~of~~ the properties of cells for medical, biochemical, and/or pharmacological purposes, or for biocompatible modification of the surfaces of implant materials, by using ~~material residues, which are formed by biological cells as cell~~ traces on substrates.

Claim 51 has been **amended** as follows:

51. (AMENDED) The process for the manipulation of biological cells, in which the cells are applied to a substrate, which is at least partially structured and/or surface modified, and move adhesively over surface track regions of the substrate while producing cell traces, wherein the cell traces ~~consist of material residues separated from the cells which contain~~ genetic materials of the cells, and the genetic materials are subjected to amplification and the amplified genetic material is subjected to a genetic analysis.